

Application No. 10/692,939
Amendment dated December 14, 2007
Reply to Office Action of October 18, 2007

REMARKS/ARGUMENTS

Applicant has carefully reviewed and considered the Office Action mailed on October 18, 2007, and the references cited therewith.

Claims 1, 10, 14, 17, 23, and 29 are amended, claims 12-13 are canceled, and no claims are added; as a result, claims 1-11 and 14-32 are now pending in this application.

§103 Rejection of the Claims

Claims 1-3, 5-9 and 17-28 were rejected under 35 USC § 103(a) as being unpatentable over Nowlin, Jr. et al. (U.S. Patent No. 6,484,309) in view of Hutchison et al. (U.S. Patent No. 6,651,123). Applicant does not admit that Nowlin, Jr. and Hutchison are indeed prior art and respectfully reserves the right to swear behind the same at a later date.

Claim 1

Applicant respectfully submits that Nowlin, Jr. and Hutchison, independently or in combination, do not describe, teach, or suggest all of the elements and limitations of independent claim 1, as amended. For example, Nowlin, Jr. does not appear to teach:

an interface module coupled between the application layer and the operating system layer. . . wherein the interface module includes:
a discrete abstraction module having translation and
conversion information therein; and
a discrete operating system emulation module in
communication with the discrete abstraction module and having
interpretation information therein

as provided in independent claim 1, as amended.

The Nowlin, Jr. reference appears to teach a method in which a translation layer is created on a non-Windows® CE computer system to operate software on a Windows® CE computer system where the translation layer communicates to the different computer systems by using the calling convention of each computer system. (Col. 8, Ln. 6-13). The Nowlin, Jr. reference appears to teach a translation

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layer that creates a surrogate set of kernel files that allow for communication between the two computer systems. (Col. 3, Ln. 4-18).

Although the Nowlin, Jr. reference appears to allow for software programs written for operation on a non-Windows® CE computer system to operate on a Windows® CE computer system, the Nowlin, Jr. reference does not appear to teach an interface module that includes “a discrete abstraction module having translation and conversion information therein” and “a discrete operating system emulation module in communication with the discrete abstraction module and having interpretation information therein,” as provided in independent claim 1, as amended. Applicant submits that the translation layer created in Nowlin, Jr., which uses the calling convention of two operation systems for communication between the two operation systems, does not appear to describe, teach, or suggest, a discrete abstraction module in communication with a discrete operating system emulation module as combined with other claim limitations in claim 1.

The Examiner cites the Hutchison reference as teaching an “interface module receives program instructions from a program in the application layer written for a second type of operating system and processes the instruction through emulation.” (Office Action, Page 3). However, from Applicant’s review of the Hutchison reference, the reference does not cure the deficiencies of Nowlin, Jr.

The Hutchison reference appears to describe a system that uses a file locking emulator between the application program and an operating system. (Col. 1, Ln. 64-67). The file lock emulator described in Hutchison appears to relate exclusively to incompatible file locking/unlocking that occurs when an API is run on different operating systems. For instance, Column 3, lines 17-24 of the Hutchison reference recites:

The problem that arises from running DDS on AIX is that while file locks are enforced between file handles (temporary reference assignments by the OS to a file and used by the OS throughout an access) on Windows NT and OS/2, they are enforced between different processes on AIX. With only one DDS process servicing incoming file requests, no file locking validation is done for any DDS requested file operations.

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However, the Hutchison reference does not describe, teach, or suggest an interface module that includes "a discrete abstraction module having translation and conversion information therein" and "a discrete operating system emulation module in communication with the discrete abstraction module and having interpretation information therein," as provided in Applicant's independent claim 1, as amended.

As such, the Applicant respectfully submits that each and every limitation of Applicant's independent claim 1 is not described, taught, or suggested by the Nowlin, Jr. and Hutchison references, alone or in combination. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the §103 rejection of independent claim 1 as well as those claims that depend therefrom.

Claim 17

Applicant respectfully submits that Nowlin, Jr. and Hutchison, independently or in combination, do not appear to describe, teach, or suggest all of the elements and limitations of independent claim 17, as amended. For example, Nowlin, Jr. and Hutchison do not appear to teach:

communicating instructions from the application to an interface module, wherein the interface module includes:

a discrete abstraction module having translation and conversion information therein; and

a discrete operating system emulation module in communication with the discrete abstraction module and having interpretation information therein

as provided in amended claim 17.

As discussed above, the Nowlin, Jr. and Hutchison references do not appear to describe, teach, or suggest, "a discrete abstraction module having translation and conversion information therein" and "a discrete operating system emulation module in communication with the discrete abstraction module and having interpretation information therein," as combined with other claim limitations in claim 17.

As such, the Applicant respectfully submits that each and every limitation of Applicant's independent claim 17 is not described, taught, or suggested by the Nowlin, Jr. and Hutchison references, independently or in combination.

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Accordingly, Applicant respectfully requests reconsideration and withdrawal of the §103 rejection of independent claim 17 as well as those claims that depend therefrom.

Claim 23

Applicant respectfully submits that Nowlin, Jr. and Hutchison, independently or in combination, do not appear to describe, teach, or suggest all of the elements and limitations of independent claim 23, as amended. For example, Nowlin, Jr. and Hutchison do not appear to teach:

interpreting the instructions from the application with the interface module through emulation, interpretation, translation, and conversion; and. . .wherein the interface module includes:

a discrete abstraction module having translation and conversion information therein; and

a discrete operating system emulation module in communication with the discrete abstraction module and having interpretation information therein

as provided in amended claim 23.

As discussed above, the Nowlin, Jr. and Hutchison references do not appear to describe, teach, or suggest, “a discrete abstraction module having translation and conversion information therein” and “a discrete operating system emulation module in communication with the discrete abstraction module and having interpretation information therein,” as combined with other claim limitations in claim 23.

As such, the Applicant respectfully submits that each and every limitation of Applicant’s independent claim 23 is not described, taught, or suggested by the Nowlin, Jr. and Hutchison references, independently or in combination. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the §103 rejection of independent claim 23 as well as those claims that depend therefrom.

Claims 4, 10-16 and 29-32 were rejected under 35 USC § 103(a) as being unpatentable over Nowlin, Jr. et al. (U.S. Patent No. 6,484,309) in view of

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Hutchison et al. (U.S. Patent No. 6,651,123) and further in view of Fletcher et al. (U.S. Statutory Invention Registration No. H1,921). Applicant does not admit that Nowlin, Jr., Hutchison, and Fletcher are indeed prior art and respectfully reserves the right to swear behind the same at a later date. Applicant respectfully traverses the rejection as follows.

Claim 4

Claim 4 depends from independent claim 1. For the reasons provided above, Applicant respectfully submits that the Nowlin, Jr. reference and the Hutchison reference, independently or in combination, do not appear to describe, teach, or suggest each and every element and limitation of independent claim 1.

The Fletcher reference does not cure the deficiencies of Nowlin, Jr. and Hutchison. The Fletcher reference appears to describe a method that allows software entities of a call processing application to invoke operations found in other entities through the use of object broker technology. (Col. 3, Ln. 56-59).

Also, Fletcher appears to describe the use of a proxy in association with a software entity not residing in the call processing application to invoke operations of a software entity within that application. (Col. 4, Ln. 6-9). That is, the Fletcher reference does not appear to describe, teach, or suggest an interface module that includes "a discrete abstraction module having translation and conversion information therein" and "a discrete operating system emulation module in communication with the discrete abstraction module and having interpretation information therein," as provided in Applicant's independent claim 1, as amended. As such, Applicant respectfully requests reconsideration and withdrawal of the §103 rejection with respect to claim 4.

Claim 10

With regard to independent claim 10, the Examiner states that Nowlin, Jr. teaches "an interface module (Translation Layer 22) to interface the application (Windows 95/NT Application 20) designed for a second type of operating system

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(Win9X operating system) with the first type of operating system (Windows CE operating system/Kernal24)" (Office Action, Page 10).

Independent claim 10, as amended, recites:

an interface module to interface the home location register application designed for a second type of operating system with the first type of operating system through emulation, interpretation, translation, and conversion; and wherein the interface module includes:

a discrete abstraction module having translation and conversion information therein; and

a discrete operating system emulation module in communication with the discrete abstraction module and having interpretation information therein; and

a connection for connecting the computing device to a publicly switched telephone network (PSTN).

Although the Nowlin, Jr. reference appears to allow for software programs written for operation on a non-Windows® CE computer system to operate on a Windows® CE computer system, the Nowlin, Jr. reference does not appear to teach an interface module that includes "a discrete abstraction module having translation and conversion information therein" and "a discrete operating system emulation module in communication with the discrete abstraction module and having interpretation information therein," as provided in independent claim 10, as amended. Also, the translation layer created in Nowlin, Jr. that uses the calling convention of two operation systems for communication between the two operation systems does not appear to teach or suggest the emulation, interpretation, translation, and conversion as combined with other claim limitations in claim 10. Nowlin, Jr. merely translates ASCII strings from Windows 95 applications to Unicode strings for use on a Windows® CE system (Col. 3, Ln. 19-22), but does not interface an application through emulation, interpretation, translation, and conversion, as recited in claim 10.

The Examiner cites the Hutchison reference as teaching "a computing device including an application layer having a home location register application thereon and an interface module to interface the application designed for a second type of operating system with the first type of operating system through emulation." (Office

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Action, Page 10). However, from Applicant's review of the Hutchison reference, the reference does not cure the deficiencies of Nowlin, Jr.

As described above, the Hutchison reference appears to describe a system that uses a file locking emulator between the application program and an operating system. (Col. 1, Ln. 64-67). The file lock emulator described in Hutchison appears to relate exclusively to incompatible file locking/unlocking that occurs when an API is run on different operating systems.

The Hutchison reference does not describe, teach, or suggest an interface module that includes "a discrete abstraction module having translation and conversion information therein" and "a discrete operating system emulation module in communication with the discrete abstraction module and having interpretation information therein," as provided in Applicant's independent claim 10, as amended.

From Applicant's review of the Fletcher reference, the reference does not cure the deficiencies of the Nowlin, Jr. and Hutchison references. That is, the Fletcher reference does not appear to describe, teach, or suggest an interface module that includes "a discrete abstraction module having translation and conversion information therein" and "a discrete operating system emulation module in communication with the discrete abstraction module and having interpretation information therein," as provided in Applicant's independent claim 10, as amended.

As such, the Nowlin, Jr., Hutchison, and Fletcher references do not appear to describe, teach, or suggest, either individually or in combination, each and every element and limitation in Applicant's independent claim 10, as amended. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the § 103 rejection of independent claim 10, as well as those claims which depend therefrom.

Claim 29

Independent claim 29, as amended, recites:

communicating instructions from a telecommunications application to an interface module, the telecommunication application configured for a first type of operating system; processing the instructions from

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the telecommunication application with the interface module through emulation, interpretation, translation, and conversion; and communicating the instructions from the interface module to an operating system that is a second type of operating system; wherein the interface module includes:

a discrete abstraction module having translation and conversion information therein; and

a discrete operating system emulation module in communication with the discrete abstraction module and having interpretation information therein

For the reasons stated above, Applicant respectfully submits that the Nowlin, Jr., and Hutchison references do not describe, teach, or suggest each and every element and limitation provided in independent claim 29, as amended, and the Fletcher reference, does not cure the deficiencies of Nowlin, Jr. and Hutchison. For instance, Fletcher does not describe, teach, or suggest "a discrete abstraction module having translation and conversion information therein" and "a discrete operating system emulation module in communication with the discrete abstraction module and having interpretation information therein," as provided in Applicant's independent claim 29, as amended.

As such, the Nowlin, Jr., Hutchison, and Fletcher references, alone or in combination, do not describe, teach, or suggest each and every element and limitation provided in independent claim 29. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the § 103 rejection of independent claim 29, as well as those claims which depend therefrom.

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CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney Edward J. Brooks III at (612) 236-0120 to facilitate prosecution of this matter.

At any time during the pendency of this application, please charge any additional fees or credit overpayment to the Deposit Account No. 08-2025.

CERTIFICATE UNDER 37 CFR §1.8: The undersigned hereby certifies that this correspondence is being transmitted to United States Patent and Trademark Office facsimile number (202) 273-8300 on this 14 day of December, 2007.

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